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DATE MAILED: 02/17/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

53644 759n 62/17/2009 STERNE, KESSLER, GOLDSTEIN & FOX. P.L.L.C. 1100 NEW YORK AVE., N.W. WASHINGTON, DC 20005

EXAMINER KELLY, ROBERT M PAPER NUMBER ARTHNIT 1633

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

CONFIRMATION NO 10/618.299 07/11/2003 James G. Barsoum 2159.0830001 6907 TITLE OF INVENTION: METHOD OF ENHANCING DELIVERY OF A THERAPEUTIC NUCLEIC ACID

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/18/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	form should be used I correspondence including d below or directed off tions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a	TE FEE and PUBLICA ders and notification of the specifying a new con-	ATIO of ma rrespo	N FEE (if requi intenance fees w ondence address;	red). I ill be and/or	Hocks 1 through 5 st mailed to the current (b) indicating a sepa	hould be completed who correspondence address trate "FEE ADDRESS" i
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				N Fo pa	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
53644 STERNE, KES 1100 NEW YOR WASHINGTON	SLER, GOLDST RK AVE., N.W.	/2009 EIN 6	& FOX, P.L.I	.С. т	herel	Cert	ificate	of Mailing or Trans	
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APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR			ATTORNEY DOCKET NO. CO.		CONFIRMATION NO.
10/618,299	07/11/2003			James G. Barsoum	soum 2159.0830001			6907	
TITLE OF INVENTION									
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DU	EF	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	_	\$0 \$181		\$1810	05/18/2009
EXAM	INER		ART UNIT	CLASS-SUBCLASS	┚				
KELLY, R	OBERT M		1633	424-093100					
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ess an assignee is ident h in 37 CFR 3.II. Comp	" Indica ed. Use	ation form e of a Customer E PRINTED ON		ativel ngle for age attorna be pr type) pate an as:	ly, firm (having as a ent) and the name eys or agents. If a inted. ent. If an assigne signment.	memb s of u no nam	er a 2 p to e is 3	ocument has been filed f
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	s SMALL ENTITY state	ıs. See	37 CFR 1.27.	b. Applicant is no le					
NOTE: The Issue Fee and interest as shown by the	ecords of the United Sta	tes Pat	ent and Trademark	Office.	in the	applicant; a regi	sterea :	ittorney or agent; or tr	e assignee or other party
Authorized Signature						Date			
Typed or printed name					Registration No.				
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	FR 1.3 U.S.C. USPT rden, sl D NOT	11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR	on is required to obtain on the collection is depending upon the interest of the collection of the complex that the collection of the complex that the collection of the colle	or reta estin divid ficer, TO	ain a benefit by the nated to take 12 m lual case. Any co U.S. Patent and THIS ADDRESS	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Dep D TO: Commissioner	by the USPTO to proces g gathering, preparing, an ne you require to comple artment of Commerce, P. for Patents, P.O. Box 145

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010. OMB 0651-0033

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,299	07/11/2003	James G. Barsoum	2159.0830001	6907
53644	590 02/17/2009		EXAM	UNER
STERNE, KESS	LER, GOLDSTEIN	KELLY, ROBERT M		
1100 NEW YORK		ART UNIT	PAPER NUMBER	
WASHINGTON,	DC 20005	1633		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/618,299	BARSOUM ET AL.
Examiner	Art Unit
ROBERT M. KELLY	1633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- This communication is responsive to 1/13/09.
- The allowed claim(s) is/are 1,34,35,38,39,41,42,44,46,56 and 57.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) \square All b) ☐ Some* c) ☐ None of the:
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3.
 ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

Status of Application Prior to the Present Allowance

Applicant's submitted After-Final amendment and argument of 1/13/09 is entered.

Claims 52 and 55 are cancelled.

Claims 1, 34, 35, 38, 39, 41, 42, 44, 56, and 57 remain pending and are herein allowed.

Statement of Reasons for Allowance:

Applicant's amendment, cancelling Claims 52 and 55, moots the remaining rejections and/or objections of record. Hence, no rejections are held against the claims.

In addition, the invention has been shown in the prosecution to be the delivery of viral vectors of the same type as the vector delivering the transgene, to thereby circumvent kupffer cell filtration of the vector, and allowing more vector with the transgene to reach other cells to be expressed. Such is borne out by the prosecution history. In addition all issues of enablement and written description have been addressed on the record. Lastly, no art of record teaches or makes obvious the overloading of kupffer cells by a second vector without the intended transgene. Hence, Claims 1, 34, 35, 38, 39, 41, 42, 44, 56, and 57 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT M. KELLY whose telephone number is (571)272-0729. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Woitach can be reached on (571) 272-0739. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/618,299 Page 3

Art Unit: 1633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M Kelly/ Primary Examiner, Art Unit 1633